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#### UNITED STATES PATENT AND TRADEMARK OFFICE

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| APPLICATION NO.  | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------|----------------------|---------------------|------------------|
| 09/351,160   | 07/12/1999     | MASAAKI'NISHIJIMA    | 0819-261            | 9367             |
| 75   | 590 12/31/2002 |                      |                     |                  |
| GERALD J FERGUSON JR<br>SIXBEY FRIEDMAN LEEDOM & FERGUSON P C<br>8180 GREENSBORO DRIVE |                |                      | EXAMINER            |                  |
|  |                |                      | OWENS, DOUGLAS W    |                  |
| SUITE 800<br>MCLEAN, VA  | 22102          |                      | ART UNIT            | PAPER NUMBER     |
| MCLLIN, VII  | 22.02          |                      | 2811                |                  |

DATE MAILED: 12/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| -   |                      |   | - Am              |  |  |  |
|---|----------------------|---|-------------------|--|--|--|
|   | Application No.      | Applicant(s)                            | V                 |  |  |  |
| ·   | 09/351,160           | NISHIJIMA, MAS                          | SAAKI             |  |  |  |
| Office Action Summary   | Examiner             | Art Unit                                | ·                 |  |  |  |
|   | Douglas W Owens      |   | nddress           |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | ears on the cover    | sneet with the correspondence a         |                   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                      |   |                   |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>17 l</u>   | December 2002 .      |   |                   |  |  |  |
| ,   | is action is non-fin | nal.                                    |                   |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |                      |   |                   |  |  |  |
| Disposition of Claims   |                      |   |                   |  |  |  |
| 4) Claim(s) 23-27,29,32 and 34-40 is/are pendin   | g in the application | n.                                      |                   |  |  |  |
| 4a) Of the above claim(s) is/are withdra  |                      |   |                   |  |  |  |
| 5)⊠ Claim(s) <u>23-27,29,32 and 35-40</u> is/are allowed.   |                      |   |                   |  |  |  |
| 6)⊠ Claim(s) <u>34</u> is/are rejected.   |                      |   |                   |  |  |  |
| 7) Claim(s) is/are objected to.   |                      |   |                   |  |  |  |
| 8) Claim(s) are subject to restriction and/c  | or election requirer | ment.                                   |                   |  |  |  |
| Application Papers  |                      |   |                   |  |  |  |
| 9) The specification is objected to by the Examiner.  |                      |   |                   |  |  |  |
| 10)⊠ The drawing(s) filed on <u>12 July 1999</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.   |                      |   |                   |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                      |   |                   |  |  |  |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.   |                      |   |                   |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |                      |   |                   |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |                      |   |                   |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |                      |   |                   |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |                      |   |                   |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |                      |   |                   |  |  |  |
| <ol> <li>Certified copies of the priority documents have been received.</li> </ol>  |                      |   |                   |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |                      |   |                   |  |  |  |
| <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |                      |   |                   |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |                      |   |                   |  |  |  |
| a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.   |                      |   |                   |  |  |  |
| Attachment(s)   |                      |   |                   |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)   | 4)                   | Notice of Informal Patent Application ( | No(s)<br>PTO-152) |  |  |  |

Application/Control Number: 09/351,160

Art Unit: 2811

#### **DETAILED ACTION**

### Response to Request for Reconsideration

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

#### **Drawings**

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the two dielectric layers with mutually different dielectric constants, as required in claim 34, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily

Application/Control Number: 09/351,160

Art Unit: 2811

published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claim 34 is rejected under 35 U.S.C. 102(e) as being anticipated by US patent No. 6,046,503 to Weigand et al.

Weigand et al. teaches a semiconductor device, comprising:

- a conductor layer (18, 18a);
- a dielectric film (24, 24') on the conductor layer;
- a conductor line (40a) on the dielectric film; wherein

the conductor layer is not formed in a region directly below the conductor line but in both sides of said region; and

the dielectric film comprises two layers with different dielectric constants.

#### Allowable Subject Matter

- 5. Claims 23-27, 29, 32 and 35-40 are allowed.
- 6. The following is a statement of reasons for the indication of allowable subject matter: the most closely related art, US patent No. 6,046,503 to Weigand et al. teaches a teaches a semiconductor device, comprising a conductor layer, a dielectric film that is a composite of two layers, and a conductor line. Weigand et al. does not teach a composite dielectric film comprising a first dielectric film and a second dielectric film on the side portions of the first dielectric film wherein the first and second dielectric films have different dielectric constants. Nor does Weigand et al. teach a composite dielectric film wherein one of the dielectric films comprising the composite film has a dielectric constant larger than 10.

.Application/Control Number: 09/351,160

✓ Art Unit: 2811

#### R sponse to Arguments

7. Applicant's arguments with respect to claim 34 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas W Owens whose telephone number is 703-308-6167. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 703-308-2772. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

DWO December 30, 2002

Stever Soke